

REMARKS

In the Office Action mailed June 12, 2002, the Examiner rejected claims 36-59. The present Amendment amends the specification and claim 36. No new matter has been added by this Amendment. Reconsideration is respectfully requested in light of the following Remarks.

A. Objection to the Drawings

The drawings stands objected to based on Examiner's assertion that limitations included in claims 36 and 58 are not shown in the drawings. Applicant respectfully traverses this objection. In the interest of compact prosecution, however, claim 36 has been amended to clarify the nature of electrode polarity without directly reciting a voltage source.

With respect to claim 58, however, Applicant respectfully submits that the recited semi-transparent layer is fully supported by the specification and drawings. The discussion on page 10 of the specification regarding the semi-transparent layer builds on the previous paragraph, which discusses the use of a reflective layer (228) as illustrated in Figure 2. The specification states that this material may be applied to the entire interior surface (page 10, line 20). It is clear in the context that the layer shown in Fig. 228 along the inside of the cavity may also represent the semitransparent layer. For the purposes of clarifying the nature of the drawing, however, this paragraph has been amended. No new matter has been added by this amendment.

Accordingly, Applicants respectfully request that the objections to the drawings be withdrawn.

B. Claim Rejections – 35 U.S.C. § 102

Claims 36-38, 40, 41, 44-47, 49-52, and 54-57 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,343,116, issued to Winsor (the "Winsor reference"). These rejections are respectfully traversed.

The Examiner asserts that the Winsor reference discloses a channel comprising a plurality of channel segments having two ends, and a plurality of electrodes (30, 32, 38a-c, 40a-c, Fig. 4) positioned adjacent to each sidewall and at the two ends of each channel segment. The Examiner notes that Winsor teaches the use of AC power provided in pairs. In response, however, Applicant respectfully submits once again that the Winsor reference fails to recite each and every element of the pending claims, including, for example, a lamp wherein the "activation voltages alternate in polarity along said series of channel segments" as recited in claim 36.

The Winsor reference discloses a discharge lamp which includes two end-electrodes and a number of sidewall electrodes provided between the two end-electrodes. The sidewall electrodes of Winsor are configured to "modify the shape of the arc discharge within the discharge chamber." (column 3, lines 51-52). The power supplies 42, 44, and 46 (associated with the sidewall electrodes) each operate at a different frequency from each other "and each at a different frequency than the end electrode power supply" (column 5, lines 19-21). Thus, the electrodes of Winsor are powered in pairs, as suggested by the Examiner, but do not alternate in polarity along the channel segments as recited in the pending claims.

In summary, the Winsor reference fails to disclose, suggest, or teach many elements of independent claim 1 as amended and the various dependent claims depending therefrom. Accordingly, Applicants respectfully request that the Section 102 rejections be withdrawn.

C. Claim Rejections – 35 U.S.C. § 103

Claims 39, 43, and 48 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Winsor reference in view of U.S. Pat. No. 6,218,776 issued to Cull et al. (the "Cull reference"). Applicant respectfully traverses these rejections and submits that no combination of the cited reference and prior art of record would include each and every element of the pending claims.

The Cull reference generally discloses a fluorescent lamp which is apparently configured to exhibit increased brightness through the use of a diffuse channel formed in the substrate. As described above, however, the Winsor reference fails to disclose a system wherein the activation voltages alternate in polarity along the channel. Hence, even if the Winsor reference were combined with the Cull reference (i.e., to disclose an enhanced-brightness flat lamp with a serpentine chamber), the resulting disclosure would still not suggest, teach, or otherwise disclose each and every element of claim 36. As such, Applicants do not need to address in detail the fact that there is no motivation or suggestion to combine the references. Applicant therefore requests that all Section 103 rejections be withdrawn with respect to the claims as amended.

D. Conclusion

In view of the above remarks, Applicants respectfully submitted that the foregoing remarks fully address the Examiner's objections, and that all of the pending claims comply with 35 U.S.C. § 112, are patentable over the art of record, and are in condition for allowance.


Attached hereto is a marked-up version of the changes made to the specification and claims by the present Amendment. The attached page is captioned "Version with markings to show changes made."

A Notice of Allowance respecting all pending claims is earnestly solicited. Should the Examiner wish to discuss any of the above in greater detail, then the Examiner is invited to telephone the undersigned at the Examiner's convenience.

Respectfully submitted,

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Version with markings to show changes made

In the Specification

Page 10, paragraph starting at line 22, is amended as follows:

Additional materials may be included to enhance lamp performance. For example, a semi-transparent layer may also be applied to at least some portion of the interior of the enclosure in Fig. 2 (e.g., at layer 228 or along inner surface of 214) to prevent ultraviolet emissive material migration into the fluorescent material or into the matrix of substrate. The semi-transparent layer can be any suitable material, such as an aluminum oxide, which tends to extend the useful life of the lamp. Thus, additional materials for enhancing the lamp's brightness and life may be used for reducing the starting voltage, extending the life of the lamp, or achieving other design characteristics.

In the Claims:

36. A lamp comprising:

an enclosure having a channel defined therein, said channel comprising a plurality of channel segments configured in series, wherein each of said channel segments in said series of channel segments has at least two ends;

a plurality of electrodes, wherein at least one electrode is positioned at each said end of each said channel segment, wherein each of said channel segments is configured to emit light in response to an activation voltage being applied across its electrodes, and wherein said [a voltage source associated with each of said electrodes is configured to produce an] activation [voltage] voltages [which alternates] alternate in polarity along said series of channel segments;

wherein at least one of said channel segments shares a first common electrode area with a first channel segment and a second common electrode area with a second channel segment, and wherein a first common electrode is positioned substantially within said first common electrode area and a second common electrode is positioned substantially within said second electrode area.